

**SUMMARY OF THE
U.S. NUCLEAR REGULATORY COMMISSION / U.S. DEPARTMENT OF
ENERGY
QUARTERLY MANAGEMENT MEETING
IN ROCKVILLE, MARYLAND
SEPTEMBER 15, 2005**

Introduction

The U.S. Nuclear Regulatory Commission (NRC) and U.S. Department of Energy (DOE) held a public Quarterly Management Meeting on September 15, 2005. The meeting was hosted at the NRC Headquarters in Rockville, Maryland, with video connections at the Center for Nuclear Waste Regulatory Analyses (CNWRA) in San Antonio, Texas and the DOE offices in Las Vegas to support staff and stakeholder interactions. Teleconference connections were also made available to interested stakeholders. The agenda for this meeting can be found in Attachment 1. Participants included representatives of the NRC, DOE, the State of Nevada, Affected Units of Local Government, Nuclear Energy Institute, other industry representatives, the press, and interested members of the public. Attachment 2 contains the list of attendees who were present at the above noted locations.

The purpose of this meeting was to discuss the overall progress of the project at the proposed geologic repository site at Yucca Mountain (YM), Nevada. The discussions focused on an update of the NRC high-level waste program, the DOE high-level waste program, and the Yucca Mountain Project activities. The status of the action items from the past meetings, and new action items resulted from this meeting were also discussed.

Opening Remarks

Jeff Ciocco, Office of Nuclear Material Safety and Safeguards, NRC, started the meeting by welcoming DOE management and staff, members of the public, and all other stakeholders. He stated this meeting was open to the public for observation and that the public would have an opportunity to make public comments.

Mr. Jack Strosnider, Director, Office of Nuclear Material Safety and Safeguards, NRC, stated that this was the third management meeting in 2005. Mr. Strosnider then welcomed DOE managers, members of the public, all other stakeholders.

Mr. Strosnider acknowledged the significant uncertainties with respect to the Yucca Mountain Project and the importance of understanding DOE's project schedules. He discussed the Environmental Protection Agency's (EPA) and NRC's proposed rulemaking regarding the 10,000-year standard and noted that EPA's public comment period ends October 21, 2005, which has been extended to November 22, 2005, and NRC's public comment period ends November 7, 2005.

Mr. Strosnider stated the NRC takes the issue of potentially falsified documents by the U.S. Geological Survey (USGS) employees very seriously. NRC expects that DOE will have a high level of confidence in the quality of information associated with the License Application.

NRC Program Update

Mr. Elmo Collins, Deputy Director, Division of High-Level Waste Repository Safety, NRC, presented the NRC program update. Mr. Collins stated the Key Technical Issues have played and continue to play a necessary role in assuring DOE submits a high-quality license application. He added NRC staff completed review of all 293 agreements, responded to 285, of which 256 are closed and 29 need additional information. Additionally, NRC responses to 8 agreements are not being released pending resolution of the potential USGS e-mail issue. NRC understands DOE plans to address agreements needing additional information before the License Application.

Mr. Collins stated DOE continues to make progress in developing the information necessary to support the preclosure safety analysis, but NRC staff still has questions to raise with DOE. NRC wants to establish a process for addressing preclosure technical issues and guidelines for the conduct of future technical exchanges.

Mr. Collins then highlighted the following activities that occurred since the last Quarterly Management Meeting on June 6, 2005:

- NRC staff accepted DOE's Quality Assurance Requirements and Description document;
- NRC staff completed its first monthly LSN supplemental certification;
- NRC staff will continue to observe the expert elicitation process for the Probabilistic Volcanic Hazards Assessment and monitor results of the drilling program;
- NRC Commissioners denied the State of Nevada's petition titled "Petition for Rulemaking to Amend the Commission's Waste Confidence Decision and Rule to Avoid Prejudging Yucca Mountain." The State of Nevada is appealing the Commission's denial;
- NRC published a notice of receipt and request for public comment on the State of Nevada's petition to amend 10 CFR Part 51.109;
- NRC staff will present the licensing review process to the ACNW on September 20, 2005;
- The next NRC/DOE Quarterly Management Meeting will be held on December 11, 2005 at NRC's Las Vegas Hearing Facility.¹

¹ Note the correct date for the next Management Meeting is December 7, 2005 at the NRC's Las Vegas Hearing Facility.

DOE Program Update

Paul Golan, Principal Deputy Director, Office of Civilian Radioactive Waste Management (OCRWM), provided an overview of the OCRWM program. He noted that progress has been made on the evaluation of the USGS e-mail issue. He stated that, after the report documenting this investigation is reviewed by the Secretary of Energy, he would like to brief the NRC on the results of the investigation. Approximately 99 percent of the required documents have been loaded on the Licensing Support Network (LSN). After DOE has completed a thorough due diligence review, the LSN will be ready for certification. The License Application will be submitted no sooner than six months after LSN certification. With respect to recent staff departures from the program, this is to be expected on projects of long duration. DOE is bringing qualified people into the program and also initiating a recruiting program to bring in qualified recent graduates with degrees in mathematics, physics, and earth science into the program to train over the next several years. In conclusion, Mr. Golan said that he is focused on doing things right from the start and ensuring a quality culture is instilled and maintained. He plans to expand the principles of Safety Conscious Work Environment to all of OCRWM and to develop a single Quality Assurance Program.

DOE Yucca Mountain Project Update

John Arthur provided an update of recent activities and progress on the Yucca Mountain Project. Regarding the recent departure of some key personnel, DOE expects employee turnover due to the long duration, complexity, and challenges of the Yucca Mountain Project; hiring and retention of well-qualified dedicated employees is critical to OCRWM's mission. Although the loss of key personnel is significant, processes are in place to ensure continuity and retention of project knowledge, policies are documented, guidelines are in place, training programs are maintained, and procedures exist to govern our work.

With respect to recent key personnel changes, Scott Wade, who has been Acting Director in the Office of Facility Operations, was named as the permanent Director. Mr. Ted Feigenbaum took over as Bechtel SAIC Company, LLC's (BSC) President and General Manager on August 15. Mr. Feigenbaum is an experienced nuclear executive with 33 years of engineering, design, construction, start-up, licensing, operational, and decommissioning responsibility in the field of commercial nuclear power.

Major work efforts supported by Fiscal Year 2005 funding include extensive work on the LSN, the License Application, site operations and maintenance. DOE understands the importance of the LSN, and has made significant progress on identifying and making electronically available our documentary material. DOE's LSN document collection has expanded to approximately 3.3 million documents. Of these, fewer than 1% will be produced in header only format under a claim of privilege.

Numerous reviews are continuing on those sections of the License Application that are not impacted by peak dose, infiltration, and fuel-in-air. Draft sections of the License Application are being reviewed in light of the draft Environmental Protection Agency standard published on August 9, 2005. DOE is also evaluating operational restrictions and design adjustments to accommodate the handling of non-standard fuel.

DOE and the Air Force are addressing aircraft hazards. DOE received NRC's letter, dated August 2, on Aircraft Hazards and is preparing a response that will include DOE's approach for addressing the 13 NRC-identified items on this issue. On August 15, DOE sent a request to NRC for specific NRC reports that DOE believes would assist in the development of its approach.

Regarding preclosure safety analysis and design, DOE understands the questions raised during the July 20, 2005 Technical Exchange and acknowledges that there may be differences in interpretations. DOE and NRC need to reach a consistent understanding as to the level of information necessary to support the License Application.

Regarding the USGS e-mail issue, the original Level B Condition Report (CR) was upgraded to a Level A after further evaluation based, in part, on the level of resources dedicated to the technical review. This CR addresses the following issues: 1) infiltration data and models, and 2) potential Quality Assurance (QA) program implementation issues and potential impacts on the draft License Application. The Extent of Condition review is nearing completion.

As part of the CR 5223 resolution process, a root cause team was established. The Root Cause team activities are currently underway and planned to be completed in mid-October. Following the completion of the root cause analysis, a formal corrective action plan will be documented, addressing any remedial issues and actions that have not already been identified and/or accomplished.

Concerning the specific infiltration work affected by the issues discussed in the e-mails, DOE is pursuing paths to remediate or replace elements of data, software, and models associated with certain USGS activities. In addition, BSC is in the process of securing the services of an internationally acknowledged expert in vadose zone hydrology to assist in remediation activities.

For numerous reasons, including the preliminary extent of condition report, the independent assessment of our safety culture review will not be pursued. However, in lieu of an independent assessment, DOE will conduct one or more self-assessments on Project QA, management processes, and nuclear culture. The current plan is to complete an assessment in early 2006.

DOE and BSC also provided status of CR 3235 ("potential willful non-compliance of Project QA"), CR 5559 ("extensive rework of technical work products"), CR 6233 ("evaluate contract changes for project requirements document"), and CR 6278 ("Yucca Mountain Site Characterization Project Requirements Document is not current"). A

continuous improvement program will be initiated to address human performance issues. DOE also needs to focus on improving the trending process.

Recently, the Office of Quality Assurance was tasked to develop a single integrated assessment schedule for management planning and information purposes. This integrated assessment schedule includes Office of Quality Assurance audits and surveillances, BSC audits and surveillances, internal assessments, and external assessments.

Throughout Fiscal Year 2005, the Project has performed evaluations of major underground system conditions and performed maintenance and improvements. These evaluations involved improvements to the emergency underground lighting system up to Alcove 6 and non-destructive tests of the rails. DOE also completed the fire hazard analyses of the subsurface, designed and procured the underground fire detection/alarm system equipment and began installation of the equipment.

A DOE team visited the Exelon Nuclear Cantera Facility near Chicago to observe practices used by Exelon to manage nuclear operations and its management and business practices. Exelon uses an integrated management system to standardize its business practices, which would be a useful tool on the Yucca Mountain Project from a business standpoint as well as for cost-effectiveness. The team benchmarked topic areas at Exelon including performance indicators, project management, design control, corrective action programs, and lessons learned programs. During a trip to the Waste Isolation Pilot Plant (WIPP) facility during the second week of August, the team performed a benchmark effort against the facility's business processes.

The yearly Quality Assurance Management Assessment is underway and DOE will keep NRC apprised of the anticipated completion schedule.

DOE is in the process of evaluating regulatory interaction schedules and re-establishing dates for interactions on the topics of interest to NRC in the area of preclosure and design. NRC has also proposed a public meeting to discuss the interactions. DOE supports this proposal, and expects that these discussions would take place at a technical exchange held later this fall where specific meeting topics and high-level objectives would be discussed.

In response to a question from Elmo Collins regarding DOE plans to respond to NRC's Additional Information Needs on the Key Technical Issues, John Arthur indicated that DOE is planning to provide NRC with information collected since the original response was provided to NRC or a pointer to where the information would be in the LA.

Quality Assurance Program Update

R. Dennis Brown (DOE) provided an overview of the Quality Assurance Program focusing on:

- Quality Assurance Requirements and Description (QARD) Rev 17
- Corrective Action Program Oversight

- Trending
- Office of Quality Assurance (OQA) Audits/ Surveillances
- Management & Operating (M&O) Contractor Quality Assurance (QA) Audits/Surveillances

In closing, he noted that Susan Lynch, State of Nevada, made a comment about the USGS e-mail issue during the last NRC/DOE Quarterly Management meeting and indicated that she had documentation of more examples of similar concerns. Ms. Lynch has provided the documentation and DOE reviewed this material and found no evidence of intentional violations of QA requirements. DOE has recently sent a letter to Susan Lynch, providing the results of their review.

NRC/DOE Closing Comments

John Arthur stated that it was a good meeting. He noted that progress has been made on the program. Understanding the extent of condition and technical impacts of the e-mail issue has taken resources. Significant progress has been made on LSN certification. In the License Application, DOE is working on the three critical areas of corrective actions: EPA's peak dose standard, the fuel in air issue, and corrective actions for moisture infiltration.

Margaret Federline noted a theme during DOE's presentations which emphasized "doing things right" and "Safety is the driver". NRC agreed and encouraged DOE to take the time and actions necessary for a high-quality license application. NRC will continue to follow DOE's evaluation of potentially falsifying documents and requested a briefing in a public meeting on the technical evaluation report and extent of conditions report and any additional evaluations at the appropriate time.

Margaret Federline stated DOE should continue to emphasize the close relationship between quality assurance and safety conscious work environment. Also, Ms. Federline noted that DOE should take the time it needs in these areas to get it right and not be driven by schedules and urged DOE to continue to work with NRC staff for improved understanding of expectations for a high-quality license application. Consistent with the September 9th NRC letter to DOE, NRC staff and DOE need to work through remaining issues, both preclosure and post-closure including the implications of the revised EPA standard on the TSPA. She encouraged DOE to address remaining comments in KTI responses which are important to DOE's safety case. NRC looks forward to hearing more about the results of DOE's trending activities and the integration of best practices to build quality in the License Application. Finally, Margaret Federline stated DOE has a good focus on organizational issues.

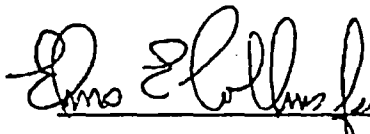
Action Item Status

The status of open action items was discussed. DOE and NRC agreed to keep open previous action items MM 0402-C1 and MM 0506-01. One new action item identified the need to hold a DOE/NRC technical exchange approximately one month after the USGS alleged falsification of data report has been released by the Secretary.

Status of the action items is summarized in the table on page 8.

Public Comments

None.

 Date: 10/20/2005

C. William Reamer, Director
Div. of High Level Waste Repository Safety
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission

 Date: 10/18/2005

Joseph D. Ziegler, Director
Office of License Application and Strategy
Office of Repository Development
U.S. Department of Energy

Consolidated Action Items
From the NRC/DOE Quarterly Management Meetings
(September 15, 2005)

Item No.	Description	Status
MM 0402-C1	DOE will identify any to-be-verified (TBV) data in the LA that needs to be qualified (if any) at the time of LA submittal (Commitment).	Open. This item will remain open until LA submittal.
MM 0506-01	DOE and NRC to determine the dates for the list of proposed technical interactions discussed during the June 6, 2005 Management Meeting.	Open. This item will remain open as a continuing action and will report progress at December management meeting.
MM 0509-01	DOE/NRC to hold technical exchange after the DOE report addressing the USGS alleged falsification of data has been released by the Secretary.	Open.

Note: The Quarterly Management Meeting action items are designated as "MM yymm-nn" where yy is the two digit year, mm is a two digit month and nn is a two digit action item number from that meeting.